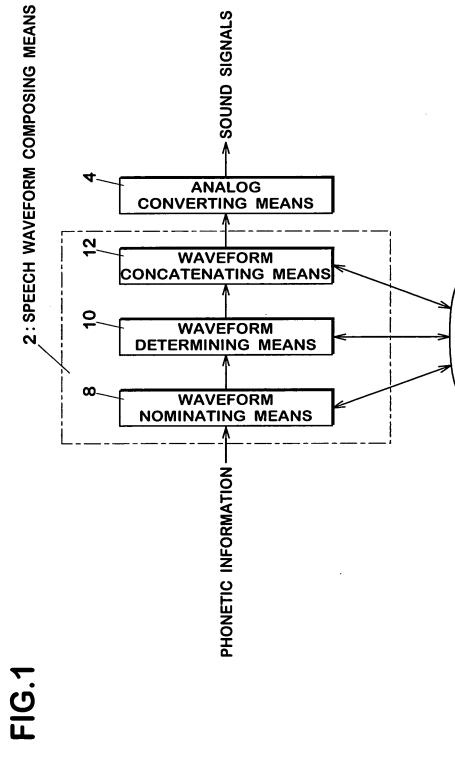
<u>r</u> /:-



►SOUND SIGNALS

ANALOG CONVERTING MEANS

COMPLETE TO THE CO

SPEECH DATABASE

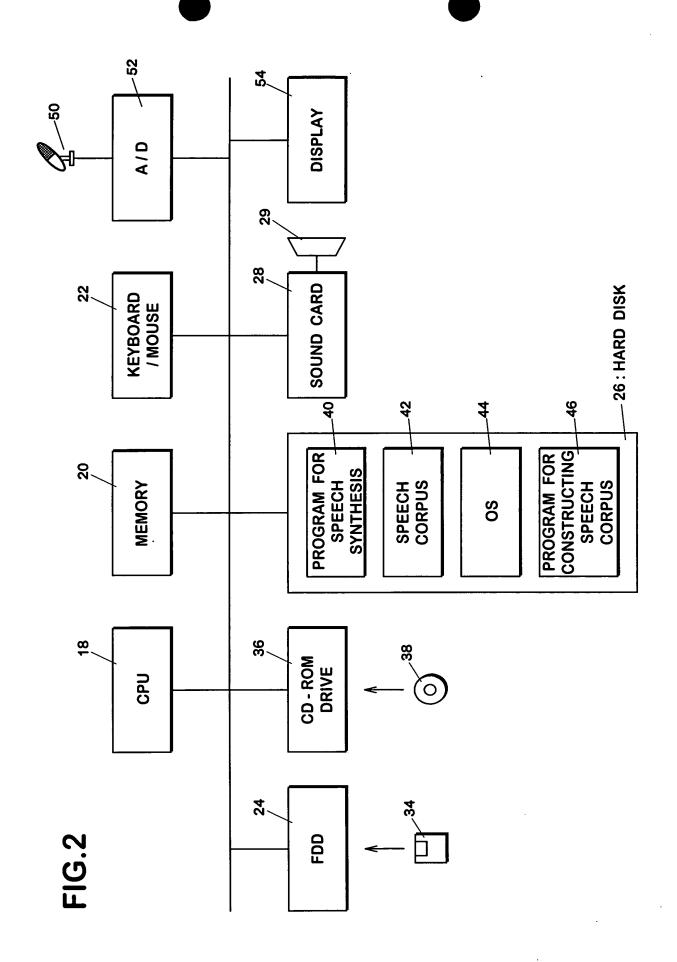
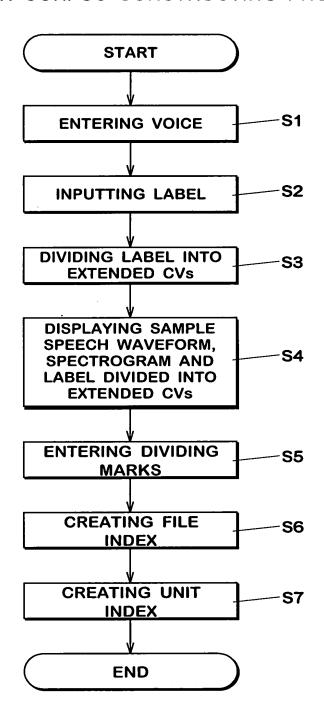


FIG.3

SPEECH CORPUS CONSTRUCTING PROGRAM



~

FIG.4A

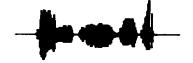
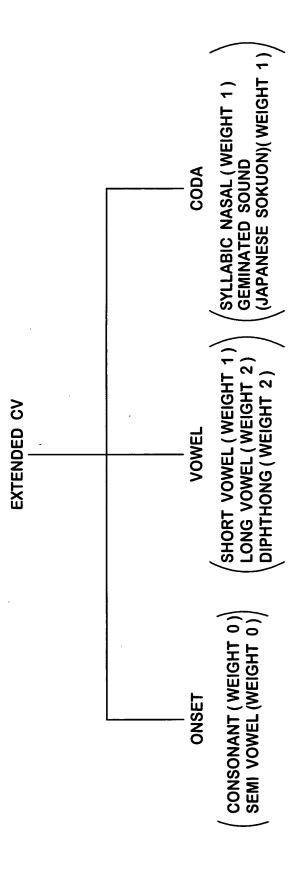


FIG.4B

ra i u chu : i ho : ga

FIG. 5

CONSTRUCTION OF EXTENDED CV



SYLLABLE WEIGHT	TYPE OF SYLLABLE WEIGHT	SYLLABLE CONSTRUCTURE	EXAMPLE
1	LIGHT SYLLABLE	(C) (y) V	ka, sa, ta, na, ha, ma, ya, ra, a, i, u, e, o, che, pya,
2	HEAVY SYLLABLE	(C) (y) VR (C) (y) VJ (C) (y) VN (C) (y) VQ	to: , ya:, kyu:, pyu:, kai, nou, ai, ui, pyua, kaN, aN, myaN, chaN, chuQ, ryaQ, jaQ, hyaQ,
3 OR MORE	SUPER HEAVY SYLLABLE	(C)(y)VRN	che:N, ju:N, a:N, u:Q, che:Q, saiN, pauN, auN, chaiN, kaiQ, daiQ, kyaiQ, uiQ, doNQ, uNQ, chaNQ,

FIG.7

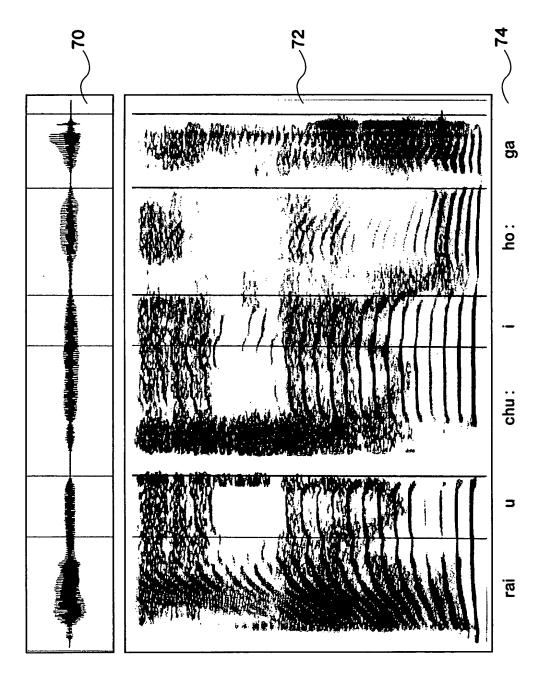
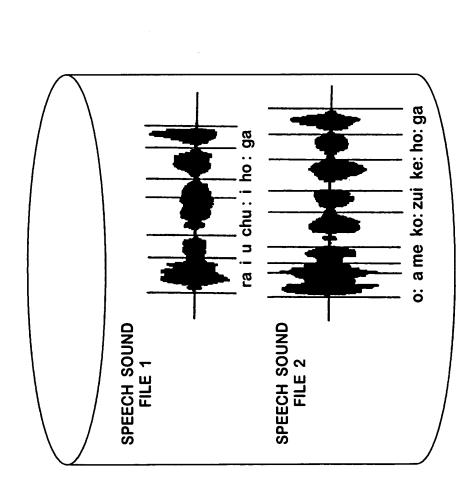


FIG.8



| SPEECH SOUND | FILE 3 | SPEECH SOUND | FILE 2 | SPEECH SOUND | STEE 1 | S

FILE INDEX

UNIT INDEX

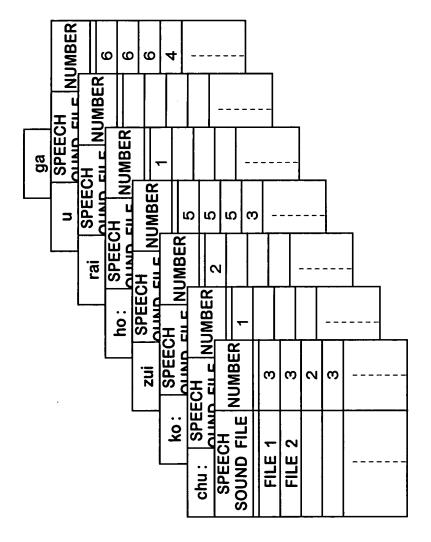
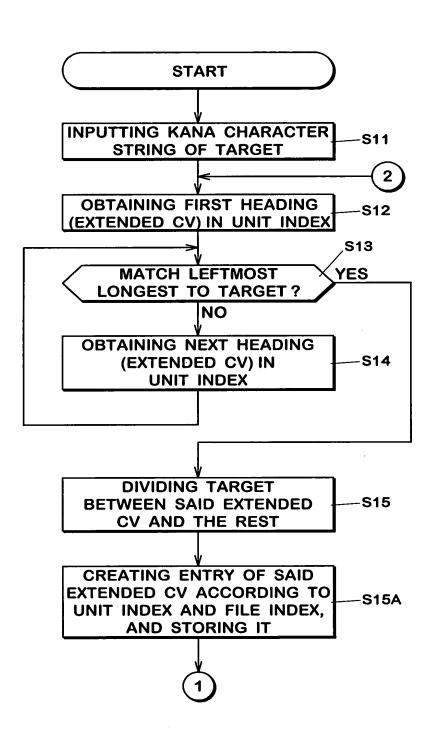


FIG.10

<SPEECH SYNTHESIS PROCESSING PROGRAM>



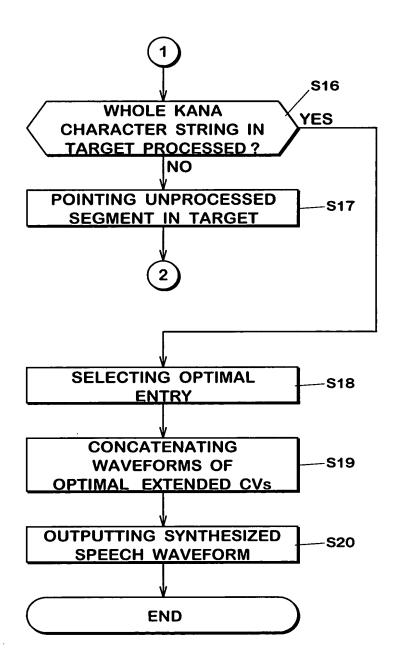


FIG.12A

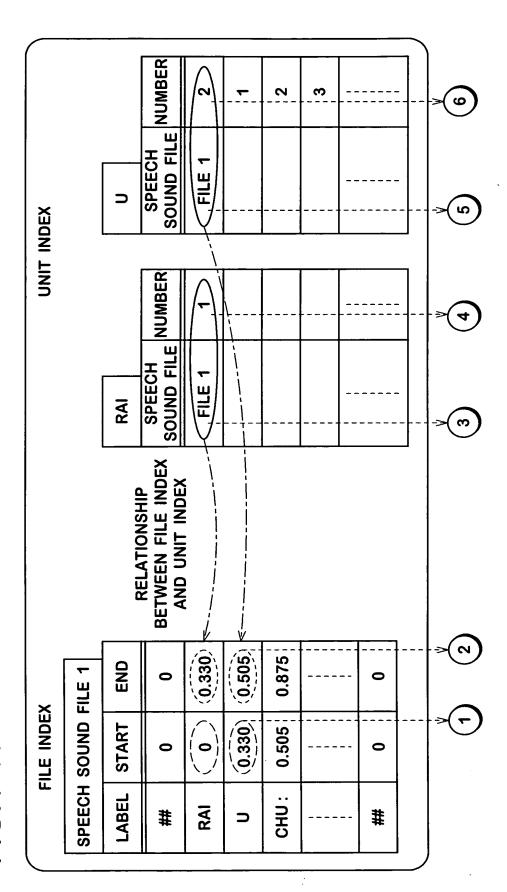
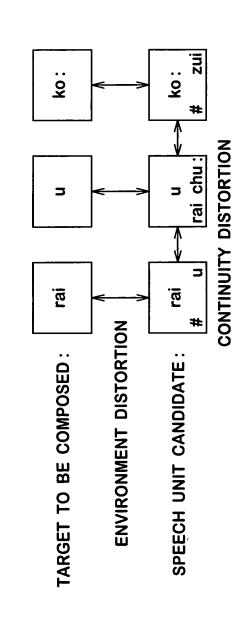


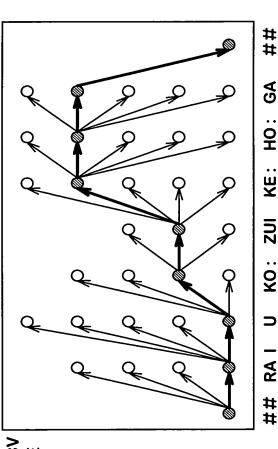
FIG.12B	(a) ·		\bigcirc	4	(g)	(a)
	INFORMATION FROM FILE IND	ION	INFORMATION FROM UNIT INDEX	TION I INDEX	INFORMATION FROM UNIT IND	TION
/##/DOWWY		THE FIRST CANDIDATE	T CANDIDATE	THE FIRST	THE FIRST CANDIDATE FILE OF " U "	
SPEECH SOUND FILE:	•	SPEECH SOUND	SOUND FILE: (FILE 1)	SPEECH SOL	SOUND FILE: (FILE 1)	
START:	000	START: END:	×(0)	START: END:	(0.330) (0.503)	<u>, </u>
LABEL: ##	MEDIATERY	LABEL: PAUSE DURATION	IMMEC	LABEL: PAUSE DURA	LABEL: (Ú)	\/
AFTER THIS EXTENDED CV: DISTORTION OF THIS ENTRY:	D CV: 0 ENTRY: 0	DISTORTION OF THIS ENTRY	AFTER THIS EXTENDED CV: \>(0)	AFTER THIS DISTORTION	AFTER THIS EXTENDED CV: (0)	
ACCUMULATED DISTORTION		ACCUMULATED DISTORTION UP TO THIS ENTRY:	DISTORTION DISTOR	ACCUMULATED DIST	ACCUMULATED DISTORTION DIP TO THIS ENTRY:	
IMMEDIATERY PRECEDING		IMMEDIATERY PRECEDING		IMMEDIATER		
CANDIDATE WITH MINIMAL "ACCUMULATED DISTORTION	. NO	CANDIDATE WITH MINIMAL "ACCUMULATED DISTORT	, <u>N</u>	"ACCUMULA	IIMAL	
UP TO THIS ENTRY ":	0	UP TO THIS ENTRY ":	ITRY": 0	UP TO THIS ENTRY ":	ENTRY ": 0	
- 8	INFOMATIN FROM TARGET	ENTRY IS INFORMA	T. T. STORED ONE BY ONE WHILE OBTAINING INFORMATION FROM INDEXES AND THE TARGET	T ONE WHILE OBTA ES AND THE TAR	INING INFOMATIN	GET
A DUMMY ENTRY IS STORED	STORED	ш	EXTENDED CV	0 0 0	050505	
FOR JUDGING COMPLETION OF REPEATING PROCESS	CESS	o	CANDIDATE		0000	
			# RAI L	1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	# RAI U KO ZUI KE HO GA #	,
			S HT	SPEECH UNIT SEQUENCE OF THE TARGET TO BE COMPOSED	UENCE OF COMPOSED	`\

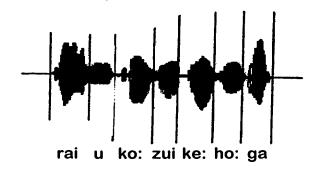
FIG.12C

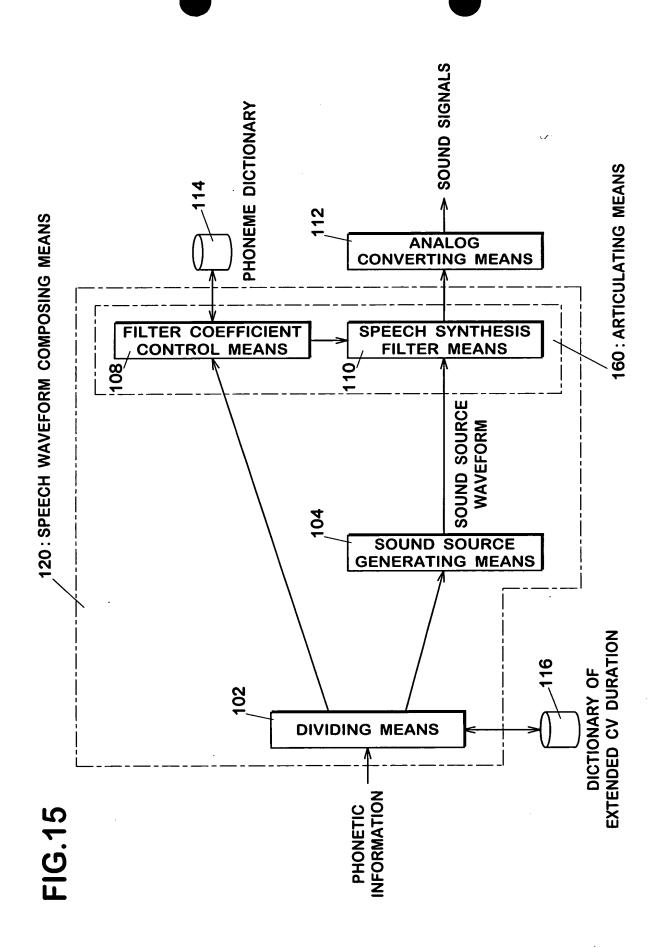
SELECT THE OPTIMAL SPEECH UNIT WHICH MINIMIZES ENVIRONMENT DISTORTION AND CONTINUITY DISTORTION

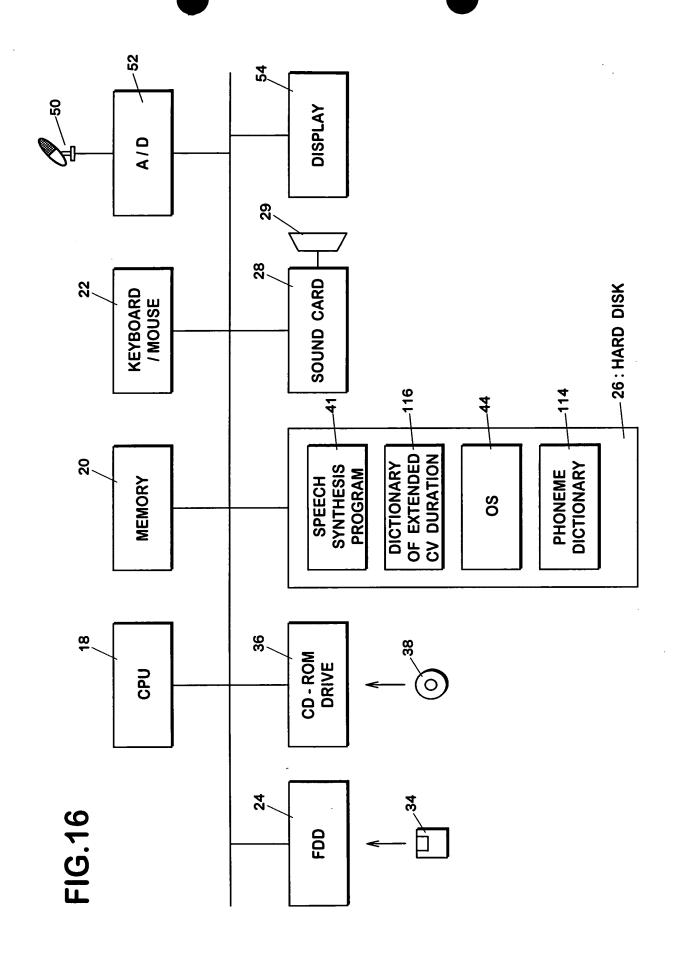




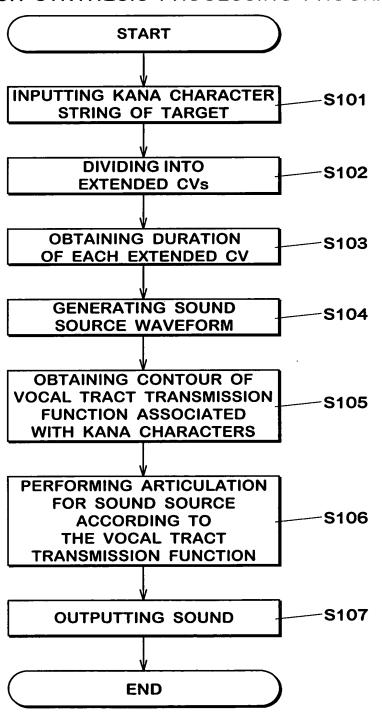








SPEECH SYNTHESIS PROCESSING PROGRAM



DICTIONARY OF EXTENDED CV DURATION

EXTENDED CV	DURATION:[MS]
CHU:	391
ко:	213

PHONEME DICTIONARY

EXTENDED CV	TIME	VOCAL TRACT TRANSMISSION CHARACTERISTIC
	٥~ ٥ ms	A
CHU:	-	• • •
	383 ~ 391 ms	A
	O~ ∞ ms	4
ZUI	1 1	; ; ; (
	201 223 ms	A
!		